THE STRATEGIC IMPLICATIONS OF SUSTAINING AND IMPROVING MILITARY HEALTH CARE

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USAWC CLASS OF 2010

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REPORT DOCUMENTATION PAGE					Form Approved OMB No. 0704-0188		
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a. REPORT UNCLASSIFED	b. ABSTRACT UNCLASSIFED	c. THIS PAGE UNCLASSIFED	UNLIMITED	38	19b. TELEPHONE NUMBER (include area code)		

USAWC STRATEGY RESEARCH PROJECT

THE STRATEGIC IMPLICATIONS OF SUSTAINING AND IMPROVING MILITARY HEALTH CARE

by

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U.S. Army War College CARLISLE BARRACKS, PENNSYLVANIA 17013

ABSTRACT

AUTHOR: Colonel Mark F. Fassl

TITLE: The Strategic Implications of Sustaining and Improving Military

Health Care

FORMAT: Strategy Research Project

DATE: 22 February 2010 WORD COUNT: 8,276 PAGES: 38

KEY TERMS: Medical, Post Traumatic Stress, Veteran, Long-term Care

CLASSIFICATION: Unclassified

Given the strategic implications of the Global War on Terrorism and current and likely future commitments of the military, it is urgent to address several persistent and new challenges facing today's current Military Health System (MHS). These include maintaining and improving the quality of patient care at Major Treatment Facility's (MTF) and greater awareness and improved treatment of Post-Traumatic Stress Disorder (PTSD), Traumatic Brain Injury (TBI), and Long-Term Care for Veterans. These challenges must be considered in the contexts of the current and ongoing needs of Active Duty, National Guard and Reserve military personnel, of their families, of the aging military retiree population, and the broader backdrop of the U.S. health care economy, in which the military health care system operates. The DoD must preserve the quality of care in order to ensure positive unit and family morale during these very trying times. The MHS must improve certain practices to ensure force readiness and provision of the highest quality health care. The all volunteer force should never have any doubt that they and their families will always receive first class care.

THE STRATEGIC IMPLICATIONS OF SUSTAINING AND IMPROVING MILITARY HEALTH CARE

The idea of military medical care for active-duty members of the uniformed services and their families dates back to the late 1700s. In July 1775 the U.S. Army Medical Corps was commissioned in order to coordinate the medical care required by the Continental Army during the Revolutionary War. In 1884, Congress directed that the "medical officers of the Army and contract surgeons shall whenever possible attend the families of the officers and soldiers free of charge." There was very little change until World War II, when a much younger soldier and family was drafted into the war. Most draftees in that war were young men who had wives of childbearing age. The military medical care system, which was on a wartime footing, could not accommodate the large number of births, or provide proper care for very young children. In 1943, Congress authorized the Emergency Maternal and Infant Care Program (EMIC), which provided for maternity care and the care of infants up to one year of age for wives and children of service members in the lower four pay grades. It was administered by the "Children's Bureau," through state health departments.

The Korean conflict again strained the capabilities of the military health care system. On Dec. 7, 1956, the Dependents Medical Care Act was signed into law. The 1966 amendments to this Act created what would be called Civilian Health and Medical Program of the Uniformed Services (CHAMPUS) beginning in 1967. The law authorized ambulatory and psychiatric care for active-duty family members, effective Oct. 1, 1966. Retirees, their family members, and certain surviving family members of deceased military sponsors were brought into the program on Jan. 1, 1967. In 1980 TRICARE

became the sole provision of health services and health benefits for each service branch. This system serves several distinct classes of beneficiaries, including Active Duty military personnel, families of Active Duty personnel, reservists, and military retirees and their dependents. Unlike civilian health care systems, the Military Health System (MHS) must give priority to military readiness-currently to the nation's engagement in a long war on terror; to support of a conventional war, if necessary; to provision of humanitarian relief and response to natural disasters; and to other missions required by national command authorities. The MHS has evolved in various ways since its creation. However, in the context of current protracted wars in Iraq and Afghanistan, it is increasingly obvious that the MHS is encountering challenges in the complex problem of caring for our wounded veterans.

The roles and contributions of the Reserve Component (RC) have changed since the end of the Cold War. From 1945 to 1989, reservists were called to active duty as part of a mobilization by the federal government only four times-an average of less than once per decade. Since 1990, reservists have been mobilized by the federal government six times, an average of nearly once every three years. Since 11 September, 2001, the RC has been used extensively to support the war on terrorism. About 500,000 out of almost 600,000 reservists have been mobilized, primarily for contingency operations in Afghanistan and Iraq. As a result, RC units are becoming more integrated into military operations, creating a new relational model between the Active Duty and RC and increasing demands on the MHS to respond to recent increases in health care expenditures.

Although the nation's commitment to military health and readiness cannot waiver, current budgetary trends will pose significant challenges. Rising health care costs result from a multitude of factors that are affecting not only DoD but also civilian health care in general. Currently 50 million Americans including many senior citizens, do not have health insurance and also live at or below the lowest earnings bracket. This sector of our population will be especially hard hit with increasingly expensive medical technology, pharmaceuticals, and no governmental subsidence for the escalating care.

Although improvements in internal efficiency will be critical to containing costs, cost cutting measures will be insufficient to stem the tide of rising health care costs, although they may help to slow their rate of growth. We must find the right balance between the increasing expenses for sustaining the expanding military operation and the growing challenges of taking care of our wounded and long-term care for soldiers and veterans. Every effort must be taken to sustain and improve military health care benefits over the long run, actions must be taken now to adjust the system in the most cost effective and qualitative ways. This SRP examines a number of MHS issues.

Military Treatment Facilities Exposed

As with much of the infrastructure and resources within the military, maintaining our Military Treatment Facilities (MTF) has become a challenge during the past nine years of war. We failed to properly plan for the possibility of a protracted timeline of conflict and the enormous amount of casualties that have resulted due in large part to the extraordinary life saving combat medical care Soldiers have received.

The U.S. has entered its ninth year of occupation of Afghanistan and Iraq- equal to the time the United States was involved in World War I, World War II and the Korean War combined. Since January 2009, over 5000 American soldiers have been killed in

Iraq and Afghanistan. Significantly, an unprecedented number of US soldiers have been injured. As of 30 September, 2006, more than 50,500 US soldiers have suffered non-mortal wounds in Iraq and Afghanistan and nearby staging locations – a ratio of 16 wounded servicemen for every fatality. This is by far the highest killed-to-wounded ratio in US history. During the Vietnam and Korean wars there were 2.6 and 2.8 injuries per fatality, respectively. World Wars I and II had fewer than 2 wounded servicemen per death.

While it is welcome news and a credit to military medicine that more soldiers are surviving grievous wounds, the survival of so many wounded veterans, many with terrible life altering injuries, is yet another aspect of this war for which the Pentagon and our civilian leaders failed to plan for, to prepare for and budget for.²

During the past few years the increased demands of injured soldiers returning from Iraq and Afghanistan have broken many fractured systems, exhausted resources, and stressed the MTF infrastructure. For example, Walter Reed Army Medical Center (WRAMC) is one of 1400 MTF's that the Secretary of Defense has asked the Veterans Administration to inspect. Many MTF's-and WRAMC in particular-have been described as rat and cockroach infested, with stained carpets, cheap mattresses, elevators that do not function, and black mold, lacking heat and water.

WRAMC had been widely perceived as a surgical hospital that shines as the crown jewel of military medicine. But 5 1/2 years of sustained combat have transformed the venerable 113-acre institution into something else entirely -- a holding facility for physically and psychologically damaged outpatients. Almost 800 of them -- the majority soldiers, with some Marines -- have been released from its hospital beds, but they still

need treatment or are awaiting bureaucratic decisions before being discharged or returned to active duty. On the worst days, soldiers say they feel like they are living a chapter of "Catch-22". The wounded manage other wounded. Soldiers dealing with psychological disorders of their own have been put in charge of others at risk of suicide.

Disengaged clerks, unqualified platoon sergeants, and overworked case managers struggle to provide patient's with simple needs: feeding soldiers' families who are close to poverty, replacing a uniform ripped off by medics in the desert sand or helping a brain-damaged soldier remember his next appointment. Yet at a deeper psychological or spiritual level, the soldiers say they feel alone and frustrated. Seventy-five percent of the troops polled by WRAMC in March 2007 said their experience was "stressful." The shortage of qualified medical personnel has led to many Soldiers not receiving the necessary supervision they require. Suicide attempts and unintentional overdoses from prescription drugs and alcohol have occurred as a direct result of these shortages. No Soldier who has selflessly served their country deserves to be neglected.

Due in large part to on-going resourcing issues, many entrances to various facilities at WRAMC are unmonitored. This has created security problems, including reports of drug dealers in front of the facility. Injured soldiers report they are forced to "pull guard duty" to obtain a level of security. Other soldiers have complained about the unforgivable squalid conditions of their rooms, claiming that the Army had broken its covenant with its troops. In an attempt to alleviate the toll of these poor conditions on the wounded soldiers, on 21 September 2006 the Garrison Command forwarded a memorandum for record detailing many of these issues to the WRAMC Commander. The Garrison Commander stated that without provision of the requested resources and

funding for upgrading the infrastructure, WRAMC services are at risk for failure. No action was taken by the WRAMC and Six months later the *Washington Post* published descriptions of the horrible conditions at WRAMC. The *Post* articles triggered a chain of events that would lead to the largest transformation within the Army's Medical Command since WWII.

Within a week of the *Washington Post* articles, LTG Kevin Kiley, the three-star general in charge of all Army medical facilities told a Senate committee that he was not aware that wounded soldiers were living in squalid conditions at WRAMC. He assured Congress in 2005 that the Walter Reed bureaucracy was improving, even though many soldiers were languishing in neglect at the facility.³

An urgent Army contract to privatize maintenance at WRAMC was delayed more than three years amid more bureaucratic bickering and legal squabbles. This led to continued staff shortages and a hospital in disarray just as the number of severely wounded soldiers from Iraq and Afghanistan was rising rapidly primarily due to the implementation of the surge strategy in Iraq. While medical care was not directly affected, needed repairs went undone as the staff shrank from almost 300 to less than 50 and hospital officials were unable to find enough skilled replacements to deal with the increasing numbers of wounded soldiers.⁴

The shortages of properly trained medical staff and inadequate space are not just limited to WRAMC. At Winn Army Community Hospital at Fort Stewart GA, the number of patient complaints recently hit a high of 616 - about four times the normal monthly level. The hospital's staff of 41 civilian and uniformed doctors began to dwindle by nearly one-third late last summer because of combat deployments, new assignments

and competition from the private sector. At its worst point, the hospital was short 16 physicians. This shortage has created a logjam in the hospital's internal medicine, pediatrics and family-care clinics. Patients complained they could not get care within a reasonable time. Many ended up going to the emergency room for routine care or were referred to outside providers. Discouraged patients and family members were unable to schedule a family therapy session to talk through some of the issues surrounding their soldier's15-month deployment and other Army deployment issues. When family members called the hospital's behavioral health clinic, they were told appointments were backed up for as long as eight months. The Army was forced to establish contracts with private providers to handle the surge.

The Army operates 36 medical facilities worldwide. Last year, 17-or nearly half-failed to meet Pentagon standards for providing a doctor within seven days for routine care. This was an improvement over the 21 facilities that fell below the standard in 2006 and 23 in 2005. The Army is also relying more on doctors in nearby communities. A recent *USA Today* investigation found that payments for outside referrals jumped from \$200 million in 2000 to nearly \$1 billion last year. Since Winn was opened in 1983, its potential patient population has grown 40 percent to 74,000 people. That's in large part because soldiers and families are being moved to Fort Stewart from other closed or reorganized bases. As a result of increased demand, the Winn Army Community Hospital has had insufficient space, facilities, and personnel to provide satisfactory services for the Fort Stewart community. The Army Medical Command failed to adequately address the many systemic issues mentioned above which have caused utter frustration and delay in treatment of Soldiers and their families.

Services such as alcohol and substance-abuse prevention and medical boards have been moved outside the hospital into temporary buildings. Soon, the behavioral health services will also be moved to a temporary space. Winn Hospital and other MTFs often receive "just-in-time funding" or "marginally adequate funding" sometimes based on incorrect projections about service demands. MTF problems are a ripple effect of DoD efforts to wage two major conflicts. It appears that War-fighting takes priority over caring for wounded Soldiers and their families. Yet failure to care for our Soldier's health needs could have a long-term shortage effect on the nation's ability to win wars.⁵

MTF Improvements and the Way Ahead

A subsequent investigation of 1,400 hospitals and other facilities for vets found more than 1,000 incidents of substandard conditions. In response to this Investigation and the WRAMC scandal, a presidential commission was appointed to investigate care for America's returning Wounded Warriors and an independent review group was assigned to report on rehabilitative care and administrative processes at WRAMC and other MTFs. Since February 2007, the DoD has moved quickly to address the substandard out-patient facilities at WRAMC. The Department has implemented a number of measures to improve health care for our wounded, ill, and injured service members. The Presidential Committee acted on some 530 recommendations put forth by several major commissions and the National Defense Authorization Act of 2008.⁶ Notable progress includes:

 Working closely with the Department of Veterans Affairs to better share electronic health data and track patients' long-term recovery process.

- Creating new facilities, with the help of private partners, such as the national intrepid centers in Bethesda, Maryland, and San Antonio, Texas.
- Improving overall case management through programs such as the Army's "Wounded Warrior" Program.

More than 3,200 permanent cadre now care for soldiers assigned to warrior transition units; they have cared for more than 21,000 men and women thus far. The following recommendations have been approved by the Secretary of Defense and are currently being implemented:

- Resources should be provided to train case managers, and develop Tri-Service policy and regulatory guidelines for case management services.
- Every returning casualty should be assigned a single primary physician care manager and case manager as their basic unit of support.
- Clear standards, qualifications, and training requirements, to include proper initial and recurring training, should be defined and conducted for case management personnel.
- Soldiers should have assessments of their functional and cognitive abilities
 prior to and immediately following deployments. Post-deployment screening
 of these assessments should identify Soldiers needing cognitive
 rehabilitation. Treatment should begin immediately.
- Comprehensive and universal clinical practice and coding guidelines for blast injuries and Traumatic Brain Injuries (TBI) with PTSD overlays should be developed; patient records should clearly document their exposure to blasts.

- A center of excellence should be established for TBI and PTSD. The center should conduct appropriate research and train treatment personnel.
- Creative recruiting and compensation plans, including a review of the Military
 Service Obligation, should address healthcare professional staffing shortages.
- The Physical Disability Evaluation System should be updated to reflect the losses of function due to burns, similar to the system used by amputees.
- The Physical Disability Evaluation System must be completely overhauled to include changes in the US Code, DoD policies, and Service regulations, to produce a single integrated solution.
- Health care services to the Reserve Component should continue to improve.
- The Base Realignment and Closure construction projects should be accelerated in the National Capital Region to expedite transitions to the Walter Reed National Military Medical Center (WRNMMC) and new Fort Belvoir medical complex; current operations should be fully funded until the transitions are complete.
- The command and control structure for WRNMMC should be established now and immediately begin functional integration.
- Existing regulatory relief to work processes should be applied to military medical treatment facilities during time of war.
- Leadership should survey patients and family members to assess services and conditions of facilities.

- Medical Hold and Medical Holdover Cadre personnel should be appropriately staffed and trained.
- The efficiency wedge should be reevaluated.
- Appropriate education should be provided to family members on their
 Entitlements; family advocates should be assigned to families of wounded
 soldiers and disabled soldiers.
- Where and when possible, patients should be relocated to receive continuing treatment closer to their homes.
- A senior facilities engineer should be assigned at WRAMC to assume responsibility of maintenance of non-medical facilities.
- Facilities assessment tools should be modernized, and facility and infrastructure maintenance, repair, and restoration prioritized and appropriately addressed.⁷

The Army Inspector General was tasked by the Army Secretary to review the medical system every six months; simple feedback forms to collect Soldier and Family input have been developed. Specially designated oversight groups from DoD will meet with hospital commanders every four to six weeks to ensure all needed changes are made and to gather feedback on their needs. While these recommendations and ongoing improvements to MTFs are not the final solution, the recommendations have been implemented and many previous problems have been remedied.

The larger issue is to ensure a continuous process of review, inspections, budgetary analysis, resource/contract management, and 24-hour care for returning Wounded Warriors. These issues should be mandated by DoD regulations; they should

be managed separately in order to streamline the processes dealing exclusively with Wounded Warriors. With the increasing toll the war has taken on soldiers, DoD civilians and their family members Congress should assure that MTFs stay at the top of the list of DoD priorities. By continuing strategic efforts to upgrade the 70-year-old MTF infrastructure and to fund military health care, we will fulfill our obligations to veterans and encourage young citizens to join the all-volunteer force that serves our great military.

Post Traumatic Stress Disorder (PTSD)

Congress and DoD are increasingly concerned about PTSD and the compounding negative effects that up to 30% of Soldiers who have been deployed to Iraq and Afghanistan suffer from. PTSD is an anxiety disorder that occurs after an individual has been through a traumatic event, either as a witness or as a victim of injury. These traumatic events are life-threatening. Victims are overwhelmed by their sense of helplessness; they have no control of their threatening situation. After the event, they remain fearful, confused, or angry. If these feelings do not subside or if they get worse, victims may have PTSD. These symptoms may disrupt their lives, leaving them unable to live normal lives.⁸

PTSD is often an invisible wound of war. Soldier's battered minds and bruised spirits have come to be acknowledged as PTSD. By one estimate, more than 300,000 of the nearly 2 million U.S. servicemen-and-women deployed since 9/11 suffer from this often debilitating condition. Their symptoms include flashbacks and nightmares, emotional numbness, relationship problems, sleeping disorders, sudden anger, and abuses of drug and alcohol. The number of cases is expected to climb as the war in Afghanistan continues; it could ultimately exceed 500,000. Over 750,000 Soldiers have

deployed two times to either Afghanistan or Iraq; many are currently serving their third tours in the war zone. The multiple deployments will produce more severe symptoms of PTSD with many Soldiers due to the repeating scenes and direct experience with trauma on the battle field. Mental-health experts say PTSD is the primary reason that suicides in the military are at an all-time high; 256 soldiers took their own lives in 2008, the highest number since that data was first tracked in 1980. As of October 2009, 134 active-duty soldiers have taken their own lives so far this year, putting the Army on pace to break last year's record of 140 active-duty suicides. The number of Army suicides has risen 37% since 2006, and last year, the suicide rate surpassed that of the U.S. population for the first time. The Army's efforts to reduce the suicide rate have failed. Experts point to excessive deployment rates and the upcoming surge into Afghanistan as reasons that will continue to undermine efforts to curtail the increased rate of suicides within Army ranks.

Just as war is not a new phenomenon, neither are the issues associated with the mental and emotional scars combat leaves on those who fight a nation's wars.

Historically, the United States has assumed a reactive, not pro-active, response to coping with the fiscal and human challenges posed by traumatized combat veterans.

The Army has been slow to respond to the need to train and educate its leaders about PTSD. Instead, the Army has devoted vast funds on the assessment and treatment of PTSD treating the symptoms as they arise, rather than attacking the stressors which cause the affliction. The U.S. operations in Iraq and Afghanistan and the deployment of U.S. forces throughout the world to counter terrorism have created conditions where PTSD threatens Army readiness at a time when the Army can least afford it.

The Army does not properly prepare commanders for the complexities of coping with PTSD in their units nor provide them with the tactics, techniques, and procedures necessary to mitigate the effects of PTSD on the combat effectiveness of their units and the Soldiers who fill the ranks. The Army should implement more rigorous assessment programs for deployed Soldiers to identify those at risk of PTSD or those who exhibit stress-related symptoms before the mental well-being of the soldier is dramatically affected and treatment becomes more difficult.¹⁰

A RAND Corporation study revealed that 20% of veterans from Iraq and Afghanistan will suffer from PTSD or severe depression; sadly, only about 50% of these veterans will get the treatment they need. A study by the Government Accountability Office (GAO) revealed that only 20% of Afghanistan and Iraq war veterans who test positive for combat related stress disorders are actually referred by the MHS for mental health treatment.¹¹ These statistics reveal the need for a multi-linked network that will track a Soldier from the first onset of PTSD related symptoms and continue throughout the treatment phases. The Pentagon has come under mounting political pressure in recent years to enhance treatment for PTSD amid criticism that initial programs have been inadequate. 12 Many military community mental health centers were hobbled by financial constraints and unable to provide enough scientifically sound care, especially in rural areas. 13 PTSD symptoms don't always wait to emerge until soldiers return home, but it can take years for veterans to receive even minimal care. Once treatment begins, Soldiers are often punished for revealing their problems. Some PTSD victims are constantly harassed in their units because the symptoms of PTSD are misunderstood and perceived as weaknesses and distractions by the Chain of Command.

PTSD is a great scapegoat for the military to tout when veterans face discrimination or have a difficult time securing jobs and making a new life in the civilian world. But while those troops are on active duty, they are supposed to simply 'soldier on' and get over it. This dismissive attitude leads many soldiers to conceal their symptoms for years. It also means that military leaders tend to ignore signs of PTSD in the ranks. Many Soldiers suffer for long periods before coming forward with their symptoms; others speak out about their condition but are denied treatment. Military practitioners tend to be extremely unwilling to diagnose PTSD in active-duty Soldiers, which makes it more difficult for individuals to have access to treatment and care." The military's reluctance to diagnose or treat PTSD is linked to its primary goal: retaining soldiers on the ground. Even if a Soldier is only marginally able to perform, military authorities may make a strategic decision to delay diagnosis and treatment, which could lead to a medical discharge. Soldiers diagnosed with psychological disorders may be reassigned to alternate duties, which only delays or prevents their access to adequate treatment or receipt of a medical discharge.

Typically, PTSD-diagnosed Soldiers are prescribed medication at the outset, often with little explanation or accompanying talk therapy. Drugs are seen as the quickest, most efficient route to retaining a Soldier on duty, regardless of the consequences. The main strategy is to prescribe the problems away with pills. So as long as someone can remain upright under their own power, and minimally perform their MOS [military occupation specialty], the military is adequately "treating" the problem.¹⁴

PTSD can lead to drug use, marital and social problems, unemployment, and suicide or homicide. According to the National Vietnam Veterans Readjustment Study,

15 percent of male veterans still suffered from PTSD more than a decade after the Vietnam War ended. In the mid-1980s, Vietnam veterans made up 20 percent of the U.S. inmate population. Disproportionate suicides and homicide rates among veterans is an outgrowth of war. A recent CBS News study revealed that veterans commit suicide at twice the rate of civilians. The U.S. suicide rate is 8.9 per 100,000 people, but this number rises to at least 18.7 per 100,000 among war veterans alone. Veterans of Iraq and Afghanistan experience an even higher rate of suicide-at least 22.9 suicides per 100,000 people.

A recent New York Times study found 121 cases of homicide or homicide charges involving Iraq and Afghanistan veterans after they had returned home. The actual number of homicides committed by Iraq and Afghanistan veterans is likely higher due to the lack of proper diagnostic screening procedures and a linked treatment network for PTSD and other related mental health issues affecting returning veterans. Since the study relied heavily on public information, it is likely that the study uncovered only a documented number of such cases. While a direct cause-and-effect relationship cannot be assumed, it is clear that trauma stemming from the realities of war exacerbates any pre-existing psychiatric problems and personal issues and has a direct connection with the higher homicide and suicide rates among veterans. 15 Over half of the veterans with PTSD indicated that they had been aggressive in the past 4 months, such as threatening physical violence, destroying property, and having a physical fight with someone. Veterans with problematic conditions that did not warrant a PTSD diagnosis reported just about the same amount of aggressive behavior as the veterans with PTSD. There appears to be a definite connection between the experience of PTSD

symptoms and aggressive behavior among Iraq and Afghanistan War veterans.

Veterans with PTSD and with a tentative PTSD diagnosis were much more likely to be aggressive than those veterans without PTSD symptoms. Individuals with PTSD may have intense and unpredictable emotional experiences. Anger and aggressive behavior may be ways of establishing a sense of control. Anger may also be a way of trying to express or release tension connected to uncomfortable emotions often associated with PTSD, such as shame and guilt. ¹⁶

The stigma of PTSD keeps many soldiers from receiving needed help. Shame remains a significant barrier to military personnel and their families getting the psychiatric treatment they need. Some soldiers report that they are often treated as outcasts when they utilize their chain of command for issues related to PTSD and depression. Many military dependents report feeling ostracized from other military families within the units and organizations that the affected soldier is in. While the stigma associated with PTSD is evident in some circumstances, documented cases of commands intentionally denying help to a soldier because they have PTSD is very low. The challenge is really to educate Army leaders about the problem and to convey the urgency of helping troubled soldiers to get the help they need and deserve. The objective of the training is to help Army leaders understand that they must embrace Soldiers with early symptoms of PTSD. Leaders must take immediate action to encourage treatment when necessary. If leaders do not act consistently and swiftly, unit readiness will suffer because in a worst case scenario up to 30% of their combat Soldiers could be at risk of suffering from PTSD and its related effects. Finally, Chains

of Command that do not take care of Soldiers with PTSD and other related mental health issues should be held immediately accountable.

While the focus of PTSD and its effects have primarily centered on Soldiers, too often the mental stress on spouses and families goes unnoticed and untreated. The effects of wars in Afghanistan and Iraq on the mental health of military spouses has risen significantly. Spouses report worrying that their loved ones will be harmed or killed in battle. The spouses are stressed because they must handle domestic issues at home and must face them as single parents. The Soldiers also fear their spouse will resent them if they seek out mental health treatment. So reluctance to get help for PTSD affects more than the soldiers themselves. To improve the situation, whole military communities must acknowledge the consequences of PTSD. In the final analysis PTSD is a tremendous public health problem for all of society.¹⁷

Improved Treatment and Diagnosis of Soldiers with PTSD

Improvements in treatment for returning soldiers, their families, and wounded veterans have recently taken center stage within Army Leadership. The Army launched a "chain teaching" program as part of an aggressive campaign to educate more than 1 million Active, Reserve and National Guard Soldiers worldwide about PTSD and Traumatic Brain Injuries (TBI). "Chain teaching" is a technique where leaders train their immediate subordinate leaders in small groups; in turn, the subordinates train those whom they lead, who in turn train the next lower level of command. This technique works best when leaders at all levels have mastered the issue. And when the leaders personally educate the force on the issue, the issue itself assumes considerable significance. So "Chain Teaching" enables soldiers at all levels to be aware of the

signs and symptoms that a fellow Soldier has PTSD symptoms and to encourage the Soldier to get help.

In late 2007 the President's Commission on Care for America's returning Wounded Warriors recommended that the Veterans Administration (VA) should provide care for any veteran of the Afghanistan and Iraq conflicts who has PTSD. DoD and the VA were directed to improve prevention, diagnosis, and treatment of PTSD. At the same time, both Departments must work aggressively to reduce the stigma of PTSD. The goal would be to improve care of two common conditions of the current conflicts (PTSD and TBI) and reduce the stigma of PTSD. The Commission declared that mentally and physically fit service members will strengthen our military into the future. DoD must prepare to augment their mental health workforce. Personnel requirements must reflect the expanding need for such personnel due to the military's expanded prevention and education missions in behavioral health. Further, both Departments should prepare for the expected long-term demand that may arise from chronic cases or delayed-onset of PTSD symptoms. The Commission recommended that Congress enable all veterans who have been deployed in Afghanistan and Iraq and who need PTSD care to receive it from the VA. It also recommended that the DoD establish a network of public and private-sector expertise and partner with the VA to build an expanded network for PTSD treatment, so that prevention, diagnosis, and treatment of this condition stays current. Specifically, it should conduct comprehensive training programs in PTSD for military leaders, VA and DoD medical personnel, family members, and caregivers. Also, it should disseminate existing PTSD clinical guidelines to all involved providers. Where no guidelines exist, DoD and VA should work with other national experts to develop them. 19 While DoD and Congress continue to make needed improvements in soldier and family treatment of PTSD, much work is still needed. An estimated 30% of veterans returning from Iraq and Afghanistan have been diagnosed with PTSD and another 10% of soldiers are developing symptoms of PTSD, so the need for qualified resources will continue to increase. Funding for treatment space and quality professionals must be provided in order to sustain and improve the over-all PTSD military treatment program. Traumatic Brain Injury (TBI)

The Army and the VA now face the immense challenge of treating TBI victims. The Army Medical Community must quickly acquire needed funding, resources, and facilities to effectively treat Soldiers with TBI. More Soldiers are returning with TBI-related injuries of a scope and magnitude the government did not predict and is now struggling to treat. TBI can be described in several ways. The brain is enclosed in the bony vault of the skull. The Cerebrospinal fluid surrounds the brain; normally this fluid protects the brain from impacts on the skull. But if a rapid force strikes the skull or the head turns violently, the brain may strike the inside of the bony vault because the protective fluid has been displaced by the force of the blow on the suddenness of the heads turning. Brain injuries do not heal like other injuries. It undergoes a functional recovery, based on mechanisms that remain uncertain. No two brain injuries are alike; the consequence of two similar injuries may be very different. Symptoms may appear right away or may not be appear for days or weeks after the injury.²⁰

Unlike in previous wars, few Soldiers have suffered gunshot wounds in Iraq and Afghanistan. The signature weapon of this war — the improvised explosive device, (IED) — has left a signature wound: TBI.

IED blasts send a highly pressurized air wave through delicate tissues like the brain, smacking it against the inside of the skull and shearing fragile nerve connections that control speech, vision, reasoning, memory, and other functions. Lungs, eardrums, spinal cords — virtually any body part — can be damaged by the pressure wave.

In prior wars, one of every five to seven troops surviving a war-related wound had a traumatic brain injury. This rate is much higher in this war. A pilot project at Walter Reed in 2003 screened 155 patients returning from Iraq; 62 percent had a brain injury. Some of these soldiers may have subtle brain damage that was not detected when they were treated for more visible wounds. Additionally, half of those wounded in action returned to duty within 72 hours before some brain injuries may have been apparent. TBI Initiatives

In 2008 the Army's Surgeon General, along with the Department of Veterans Affairs, formed a Joint Task Force to look specifically at how the Army could rapidly respond to the extraordinary demand for specialized care for Soldiers suffering from TBI. As a result of the Joint Task Force's efforts, thousands of Soldiers that have the most complicated TBI cases are treated at one of the four polytrauma centers in Tampa, FL; Richmond, VA; Palo Alto, CA; and Minneapolis, MN. These centers were formed after doctors realized that they were not identifying some serious problems. Amputees were confused and unable to put on their prosthetics because of undiagnosed brain injuries; Soldiers could remember their therapy dog's name but not their doctor's name; Soldiers could carry on a coherent conversation but not recall what they had for breakfast. Patients at these centers have an average of six major impairments treated by 10 specialists.²¹ The Army is building a specialized care and research center for TBI patients at Fort Belvoir, Va. This center will be the first of its kind. It will assess the

newest attempts to diagnose and treat Soldiers with TBI. The new center will bring together best practices in treatment, research, education, and training.²² It is one of several initiatives to ensure a broader scope of care is delivered to our Soldiers in clinical areas that until recently have received minimal attention.

U.S. soldiers in Iraq and Afghanistan who have serious brain injuries receive immediate care on the battlefield and are then transported aboard C-17 Globe Master aircraft manned with Critical Care Air Transport (CCAT) teams.²³ During the Vietnam War, it took an average of 41 days to move a wounded man from the bush to a hospital in the United States. Today, a soldier seriously wounded in Fallujah can be whisked to the Iraqi theater hospital, transferred to the American-staffed Landstuhl Medical Center in southwestern Germany, and then flown to National Naval Medical Center in Bethesda, Maryland, or WRAMC within 36 hours.²⁴ Since 1 April 2003, Air Force aero medical evacuation personnel have flown more than 136,000 patient movements worldwide, including more than 8,700 so far in 2009.25 When the Soldiers arrive in the U.S., they are eventually transferred to one of the participating U.S. hospitals for assessment and treatment. Ninety-five percent of Soldiers treated at these centers survive their injuries and most of them will lead relatively normal lives after recovering. The Army has aggressively sought to prevent, diagnose, and treat TBI related injuries; but much remains to be done to understand and respond to these sometimes silent wounds.

Many recommendations have been implemented from findings of several task forces that identified early problems with TBI related treatment. The DoD has standardized the definition of TBI. Clinicians have stratified levels of severity of brain

injuries. Medical experts have developed a uniform process for collecting and reporting TBI data. Automated Neuropsychological Assessment Metrics (ANAM) testing is now conducted as part of Soldier Readiness Processing. ANAM is a cognitive assessment tool that provides a standard, objective measurement of each soldier's reaction time, some aspects of memory, and other cognitive skills. This can be used to aid diagnosis in theater. Then after redeployment the ANAM can be used to help identify cognitive changes, including assessing the effects of any identified mild brain trauma that may have gone unnoticed, untreated, and undocumented. The Army additionally introduced TBI Program Site Certification guidelines, which established and standardized screening, treatment and rehabilitation based on military and civilian best practices. The TBI Program Site Certification staffing model includes behavioral-health assets dedicated to the care of patients with TBI. Other recommendations included establishment of the DoD Army Primary Care Clinical Management Guidance for Mild TBI, which the Army has funded to develop mild TBI Clinical Practice Guidelines to facilitate collaboration between DoD and the Veterans Health Administration. Various education efforts have been launched at all levels, including the Defense and Veterans Brain Injury Center (DVBIC) TBI Conference held in October 2009, which was attended by 388 Army health-care providers. Likewise, a chain-teaching program was launched last July; it has already reached more than 1 million Soldiers in units throughout the Army. Finally, a standardized template was developed to document Military Acute Concussion Evaluation (MACE) in theater. MACE provides a common starting point for the history and initial evaluation of concussion; it helps triage troops either into another level of care or to further evaluation of a suspected concussion.

The Army wants Soldiers and their Families to know that TBI is a treatable condition. Marked improvement has been documented in most cases—especially in concussion. The Army leadership is proactively addressing the issue. Army leaders are committed to continued research in this area so we can more clearly understand the medical impacts of the war and identify the best ways to prevent recognize and treat Soldiers with TBI.²⁶

Long-Term Care Implications

Some severely wounded veterans require long-term care (LTC). As previously stated, dramatic reductions in non-survivable battle traumas have created an even greater need for lifetime care of severely wounded veterans from Iraq and Afghanistan. Understandably, the cost for this care can be astronomical. It is estimated that long term care of our wounded veterans could reach one trillion dollars for the current generation of veterans over their lifetimes. When the number of mental health patients from the War on Terror is added into the mix, the cost for quality care rises even higher.²⁷

The severity of injuries, the co-morbidity of conditions, and the survival rates have altered the long-term care requirements for the current generation of veterans. Many Wounded Warriors rely on a comprehensive array of medical, rehabilitative, educational, and financial support—whether for a transitional period or for the rest of their lives. Unprecedented demands are being placed on the family members as they cope with their own deep sense of loss and uncertainty about the future. Spouses and parents find themselves becoming full-time nurses, chauffeurs, spokespersons, and personal managers—roles that frequently compromise their own livelihoods, if not their well-being. Extraordinary demands are being placed on those charged with providing medical care and other professional services for this population. They are being asked

to serve a generation of veterans that is starkly different from the older veteran population they know. On the whole, these wounded veteran's problems are more severe, complex, and urgent; the population is younger; the rehabilitative tools and technology are evolving and increasingly sophisticated; and, perhaps the expectations of the veterans, families, and American people are higher.²⁸

As the DoD contemplates the long-term implications of caring for the more than 1.8 million military personnel who have served in Iraq and Afghanistan, it is a daunting realization that the United States, for many years to come, will be obliged to care for tens of thousands of veterans whose lives are permanently marred by grave physical and traumatic brain injuries, psychological scars, PTSD, and a host of associated problems ranging from divorce and substance abuse to domestic violence, homelessness, and run-ins with the law.²⁹

Then there are the myriad of problems associated with long-term care of the estimated 500 thousand veterans and their families that are receiving treatment for various complications as result of their participation in combat operations in Iraq or Afghanistan. The economic cost to the American tax payers is stupefying. For example, the total cost (tax burden) of the war in Iraq and Afghanistan to a family of four is estimated to be \$20,900. The future impact on a family of four skyrockets to an estimated \$46,400 when all potential health care costs from 2002 to 2017 are included. The costs will continue to rise as the conflicts go on. The DoD short and long-term health care budget must be viewed within the context of the overall growth in health care spending in the United States. Any recommendations for change in the

Conclusion

Military health care will continue to undergo one of its largest revisions since WWII. It will transform into a much improved institution. DoD committees and Congressional mandates are currently tackling the tough issues of quality of care and associated costs of treatment of soldiers within MTF's, treatment and education of Soldiers with PTSD and their families, Soldiers with TBI and the long-term care associated with their life-altering injuries. Recently, Congress approved 250 million dollars that will fund shortcomings in the areas mentioned above. A DoD Task Force has just concluded in its interim report that there should be no changes in the health care benefits offered to Active Duty military personnel, which are available mostly without charge to the beneficiaries. The benefits are designed principally to maintain a ready military. Maintaining a high level of health readiness constitutes one of the Task Force's most important considerations. The Task Force recommends no significant changes in costs for care provided to Active Duty dependents.

Many of the problems addressed in this paper should have never happened. How could such problems at WRAMC arisen with so much inspection criteria, procedural guidance, quality assurance boards, DoD and Congressional oversight? The answer lies within the bureaucracy of government and its resistance to change even when there is significant evidence that change is needed to prevent severe problems within an organization. Even in retrospect, it is difficult to completely explain the negligence regarding the care of some of the recovering soldiers and their families. Whether such problems surfaced at WRAMC or another MTF there aren't any excuses, there may be some explanations. For example, the Army's "can-do," "sleep on the ground" culture may have distracted leadership from the need for more resources and

decreased the likelihood that those resources would be requested. "We have everything we have asked for." Should we have asked for more?

The most important factor affecting the gaps in care was the context of the War. Former Secretary of Defense Donald Rumsfeld replied when challenged about the Army's preparedness for the conflict in the summer of 2004, "You have to go to war with the Army you have, not the Army you want." The Army medical system went to war with what it had. It realized the tremendous success in achieving the lowest died-of-wounds rate in history. Rehabilitation of these severely wounded Soldiers was another matter.

This conflict was unique. Military planners had not anticipated that the war would last eight years, nor did they anticipate all of the long-term rehabilitative needs of the severely wounded survivors. More importantly, no one anticipated that so many soldiers would be so reluctant to transition out of the DoD MHS and into the Veteran's Administration—that so many would opt to stay on active duty for as long as they could. The nature of the war compounded the situation. We went to war with an all-volunteer force across the military-in both our combat and in our medical forces. Many of the young Soldiers who were wounded and facing the end of their military career had spent their entire adult lives as Soldiers. They were not merely reluctant to give up being Soldiers; many had no other identity to which they could return.

The DoD medical community was likewise reluctant to recognize and respond to the strategic shift that had occurred as the MTFs slowly transformed from serving as acute, specialty care hospitals to also being the most important rehabilitation centers in the Department of Defense. When the population grew at WRAMC and other MTF's due to the length of the wars and Soldier survivability rates, the leadership within the Army

Medical Command and DoD failed to appreciate the emerging problem and adapt to the significance of this strategic mission change. Long-term rehabilitation has traditionally been a VA obligation.³² In reality, in order for MHS to have corrected course enough to have met the surge of injured Soldiers and their unique battle wounds, it needed to start changing course about five years ago.

The Army Medical Command has swiftly begun the arduous task of changing course. Tremendous progress has been made in the care of wounded and of rehabilitating soldiers. Recently, I had a chance to visit WRAMC. Talking to medical staff personnel engaged in those changes, I became much more aware of this transformation and appropriation of the creation of a new system of medical management for ill and injured soldiers. Soldiers that I talked to stated that the care they received at WRAMC was outstanding. They reported that their families were well received by the medical staff and that there was clear communication with the family regarding the care the Soldier was receiving.

On 14 October 2009 during the Anton Myers Leadership Day held at Carlisle Barracks, Pa, I had a chance to listen to and ask questions of LTG Erik Schoomaker, Army Surgeon General and Commander of Army Medical Command. LTG Schoomaker asserted that leaders must communicate on the same level as their commands communicate. He mentioned that strategic communications enable leaders to deliver a consistent message over time and space. In the early stages of the war in Iraq and Afghanistan, the Army Medical Command was not executing this strategy very well. LTG Schoomaker added that communication becomes even more challenging when you add in the many diverse sub-cultures of the medical community. The Army's

medical team must understand the organizational relevance of each of these subcultures. Whether the message relates to technicians in Radiology or Burn Treatment Clinics, everyone must understand the inherent mission and see how their organization fits in to the big picture. LTG Schoomaker made it very clear that he is determined to transform the Army's Medical footprint and make it flexible enough to meet the everchanging ways our Army engages the enemy and the individual toll-these operations have on Soldiers and their families (see diagram below, Army Medicine Strategy Map).³³

One thing is certain. We must never forget the sacrifices our brave men and women are making every day on the battlefield. These courageous and selflessly dedicated individuals volunteered to serve their nation in a treacherous and violent

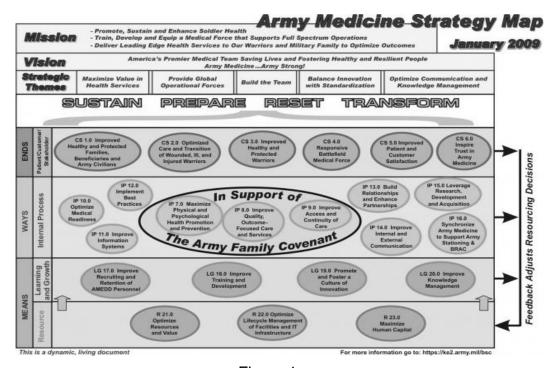


Figure 1:

period in our history. Equally heroic are the Soldiers families that selflessly support and demonstrate an outpouring of love to their Wounded Warrior as they painfully watch them adapt to a lifestyle that has been completely altered both physically and mentally.

A sister of a Wounded Warrior writes of taking care of her brother, whose brain was decimated from the percussion wave of an IED blast: "We must never forget how much we have already received. My brother has been given back to us multiple times: from death, from a vegetative state, and from an enfeebled condition".³⁴ We cannot afford to abandon any service that provides comfort, life-saving measures, and long-term care to the Wounded Warriors and their families.

President Abraham Lincoln spoke of the nation's moral obligation to care for wounded veterans in his second inaugural address: "To care for him who shall have borne the battle and for his widow, and his orphan." Lincoln's pledge has become the VA motto. Lincoln's words now resonate among the medical caregivers and Soldiers alike. Much improvement has been accomplished in caring for and treating our Soldiers and their families in the two years since the Walter Reed scandal hit the newspapers. Much more will be expected. We cannot fail in our responsibilities to uphold the sacred commitment of providing the best care possible to those who have given selflessly of themselves in defense of freedom. If we do not live up to our obligation to take care of these veterans, then we may lose our all-volunteer force. We must insist that a consistent plan is always effectively working to improve the MTF infrastructure, hiring the right number of quality medical personnel and ensuring that Congress appropriates adequate annual funding for all veterans. If as a nation we fail to adequately and qualitatively care for all veterans, then the freedom we all cherish and died defending, will be forever tarnished.

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